

**Amendments to the Drawings:**

A new drawing sheet containing new Figure 9 thereon is added to illustrate the method steps recited in the claims. No new matter is added.

- 5 In addition, two replacement sheets are submitted, having Figures 1 and 4 thereon. Figure 1 is amended to add the reference signs 121 and 122 mentioned in paragraph 16 of the specification. Figure 4 is amended to add the legend of "Reference Art".

Acceptance of the corrected drawings is respectfully requested.

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Attachment:	Replacement Sheets	2 pages
	New Sheet	1 page

**REMARKS/ARGUMENTS**

1. Objection to the specification:

The disclosure is objected to because of the following informalities:

In paragraphs 17 and 18, the term "TMAI" appears to be incorrect.

5      Appropriate correction is required.

**Response:**

Paragraphs 17 and 18 have been amended to replace the term "TMA1" with the term "TMAI" commonly used in industry. No new matter is added.

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Additionally, as a result of the new Figure 9 added to this application, the specification has been amended to add new paragraphs 15.1 and 18.1.

Acceptance of the specification is respectfully requested.

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2. Rejection of claims 1-8 under 35 U.S.C. 103(a):

Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Lai (US 2004/0261693) in view of Ishibashi (US 5,923,950).

20      **Response:**

Claim 1 recites the steps of "introducing a first reaction source comprising a first group III element into a chamber at a first temperature, the melting point of the first group III element being lower than the first temperature, wherein the first group III element is deposited on the substrate" and "introducing a second reaction source comprising a second group III element and a third reaction source comprising a nitrogen element into the chamber at a second temperature for forming a ternary nitride-based buffer layer with the first group III element on the substrate, wherein the second temperature is not lower than the melting point of the first group III element."

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However, Lai does not teach the process of introducing the first group III element, the second group III element, and a nitrogen element into a chamber for forming the buffer layer.

5           Ishibashi teaches introducing TMA and  $\text{NH}_3$  at the same time into a furnace having a temperature of  $1090^\circ\text{C}$  for forming the AlN buffer 12. Even if the Examiner considers Ishibashi's single crystal layer 13 to be a buffer layer, the process for creating the single crystal layer 13 still involves introducing TMA, TMG, TMI, and  $\text{NH}_3$  at the same time. Thus, Ishibashi does not teach the  
10       claimed steps of introducing the first group III element, the second group III element, and the nitrogen element into the chamber at different temperatures.

For the above reasons, the applicant submits that neither Lai nor Ishibashi teach all of the claimed limitations contained in claim 1. Claims 2-8 are  
15       dependent on claim 1, and should be allowed if claim 1 is allowed. Reconsideration of claims 1-8 is therefore respectfully requested.

In view of the claim amendments and the above arguments in favor of patentability, the applicant respectfully requests that a timely Notice of Allowance be  
20       issued in this case.

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Amdt. dated September 29, 2007  
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Sincerely yours,

Winston Hsu

Date: 09/29/2007

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